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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/691,262

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Eric M. Peterson

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INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

KEEFER, MICHAEL E

ART UNIT

PAPER NUMBER

2454

NOTIFICATION DATE

DELIVERY MODE

04/03/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/691,262	Applicant(s) PETERSON ET AL.	
	Examiner MICHAEL E. KEEFER	Art Unit 2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-8,10-13 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-8,10-13 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed 12/23/2008.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-3, 6-8, 11-13, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaidya (US 6279113) in view of Skonnard ("SOAP: The Simple Object Access Protocol").

Regarding **claim 1**, Vaidya discloses:

A network usage analyzer, comprising:

a network query client residing in a first network; and (central data repository 12, in network 11)

a network query server residing in a second network protected by a firewall, (Data collector 10 in network 24, as stated in the first paragraph of the detailed description, data collectors can be firewalls, in addition to their data collector functionality. Data repository 12 polls the data collectors to obtain network security data. (Col. 5 lines 27-29)

wherein the network query server is operable to receive a query from the network query client related to how resources in the second network are used and wherein the network query server is operable to collect data related to how resources in the second network are used. (the network security data that is

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returned indicates whether resources are being used to attack a system. The data collectors collect information regarding packet traffic. (Col. 5))

wherein at least one query is formatted to enable transmission using an the underlying transport mechanism. (Data collector 10 in network 24, as stated in the first paragraph of the detailed description, data collectors can be firewalls, in addition to their data collector functionality. Data repository 12 polls the data collectors to obtain network security data. (Col. 5 lines 27-29)

Vaidya discloses all the limitations of claims 1, 3, 7-8, and 13 except for using HTTP to send queries, the firewall explicitly not being reconfigured, and that the protocol used to poll the data collectors is SOAP.

The general concept of using SOAP to provide application functionality between networks with firewalls and avoiding reconfiguring them is well known in the art as taught by Skonnard. ("most firewalls block non-HTTP requests. SOAP gets around these limitations to provide intraprocess communication across machines." Page 1, Paragraph 1)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Vaidya with the general concept of using SOAP to provide application functionality between networks with firewalls and avoiding reconfiguring them as taught by Skonnard in order to open as few ports in the firewalls as possible.

Vaidya and Skonnard teach all the limitations of claims 1, 3, 7-8, and 13 except for the repository authenticating with the data collectors.

The general concept of authenticating between a client and server using a request and acknowledgement is well known in the art as taught by Korematsu. (Col. 1 lines 46-59 teach sending a authenticate request and an authenticate acknowledgement.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Vaidya and Skonnard with the general concept of authenticating between a client and server using a request and acknowledgement as taught by Korematsu in order to make sure that possible network attack information is not passed to non-trusted entities.

Regarding **claim 2 as applied to claim 1**, Vaidya discloses:

wherein the network query client and network query server are operable to communicate using a common protocol. (Since there are no protocol translators, in Fig. 1, the data collectors and data repository must inherently be using a common protocol to communicate.)

Regarding **claim 11 as applied to claim 6**, Vaidya discloses:

receiving, by the network query server, network configuration information. (Col. 5 lines 66-67 discloses network configuration data being sent (thus inherently received) to the data collectors.

Regarding **claims 16 as applied to claims 1, 6, and 12**, Vaidya discloses:

Transforming collected information into business information. (Col. 5 lines 50-51 discloses generating reports regarding intrusion detection history, which is business information.)

Regarding **claims 17 as applied to claims 1 and 12**, Vaidya discloses:

Network usage information based off of a time of day. (Vaidya polls the data collectors for new information, thus the network information retrieved is based upon the time of day at which the polling takes place.)

Claims 6, 12, and 18-20 are rejected for similar reasons as the claims above.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaidya, Skonnard and Korematsu as applied to claim 6 above, and further in view of Jackson et al. (US 2002/0049909).

Vaidya, Skonnard and Korematsu teach all the limitations of claim 10 except for authenticating periodically.

The general concept of periodically renewing authentication is well known in the art as taught by Jackson. ([0085] teaches verification of authentication at periodic or continual times.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Vaidya, Skonnard and Korematsu with the general concept of periodically renewing authentication as taught by Jackson in order to further increase the security of the authenticated connection.

Response to Arguments

5. Applicant's arguments filed 12/23/2008 have been fully considered but they are not persuasive.

6. First, Applicant asserts that the rejection is improper because the Examiner appears to have stated that a reference teaches a limitation while simultaneously saying

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the same reference does not teach a limitation. The Examiner has updated the claim mapping to clarify the Examiner's position that the use of the HTTP protocol is not taught by Vaidiya, as the Examiner has previously admitted in prior office actions, and that this limitation is taught by Skonnard, which the Examiner has also asserted in the previous office actions. (Applicant's Arguments, pg 11, paragraph 1)

7. Applicant then asserts that the rejection is improper because of the amendments including various dependent claims have been added. (pg. 11 paragraph 2) These arguments are moot based upon the new rejections of the independent claims due to the amendments made by Applicant.

8. Applicant then argues that the combination of Vaidiya and Skonnard fails to teach the limitation that the queries are related to "how the resources in the second network are used". (page 11, paragraph 3, which continues onto page 12) Applicant then attempts to limit the claims to only the recitations" in paragraph 15 of the instant specification. The Examiner disagrees, because paragraph 15 does not provide a concrete, limiting definition of "how the resources in the second network are used", in fact, it suggests that the examples given are just illustrative, and not an exhaustive list. Thus, the Examiner believes that Applicant is attempting to import limitations from the specification without amending these limitations into the claim itself. Claims are read in light of the specification, but the specification is not read into the claims. Queries regarding network security of resources do relate to how the resources of that network are being used, i.e. are they being used properly or not.

9. Applicant then argues against the previous rejection of claims 9 and 14 (now the rejection of claims 1, 6 and 12) that first the combination of Vaidiya, Skonnard, and Korematsu would fail to disclose HTTP as a transport mechanism. The Examiner disagrees, and refers Applicant to section 7 above. Second, Applicant reiterates the arguments that the Examiner has addressed in section 9 above, and thus the Examiner refers Applicant to the discussion of these limitations in that section. The same applies to Applicants arguments regarding claim 10.

10. Applicant also argues that Vaidiya teaches away from a combination with Skonnard. However, the Examiner has argued that this is not the case in the previous Office Action mailed 9/23/2008, and Applicant has not responded to the Examiner's rebuttal of this argument, merely asserted that the combination is improper again. For Applicant's convenience the Examiner will restate his response to this argument here.

Applicant argues that Vaidya teaches away from modifying Vaidya with Skonnard because of various security concerns with SOAP and confidential information. However, Skonnard provides various ways of ensuring security while still maintaining the use of HTTP port 80 for use for web services. For instance, page 2 "SOAP makes it possible for system administrators to configure firewalls to selectively block out SOAP requests", this idea is further discussed on page 6 under the heading of "Firewall Filtering". Additionally, on page 9, Skonnard specifically discusses how to secure SOAP connections (see the SOAP Security section). Therefore, one of ordinary skill in the art would see that SOAP could be implemented to simplify the number of ports on the firewall that must be open while still maintaining the security of the "usage data".

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11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL E. KEEFER whose telephone number is (571)270-1591. The examiner can normally be reached on Monday through Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 3/28/2009

/Dustin Nguyen/

Primary Examiner, Art Unit 2454